HANFORD MISSION SUPPORT CONTRACT

Conducting Pre-Job Briefings and Post-Job Reviews

MSC-PRO-14047

Revision 7

Effective Date: April 28, 2011

Topic: Work Control

Conducting Pre-Job Briefings and Post-Job Reviews

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1.0 PURPOSE

This document provides a standard approach to Pre-Job Briefings (PJB) and Post-Job Reviews (PJR) for work activities conducted within the Mission Support Contract (MSC).

This document partially implements the ISMS Core Functions #4, Perform Work Within Controls, and #5, Provide Feedback and Continuous Improvement.

2.0 SCOPE

This Level 2 Management Control Procedure defines the process to be followed by MSC Team employees performing MSC scope of work when that work falls into the designation of "field work". It provides direction as to when Pre-Job Briefings and Post-Job Reviews are required to be conducted, instructions for conducting them, and expectations for documenting these work activities.

Field work, whether conducted per work documents generated in accordance with MSC-PRO-12115, Work Management or per technical procedures developed by the projects, is expected to begin with a Pre-Job Briefing for the purpose of exchanging essential information about the work between the assigned workers and task Supervisor/Work Leader. The pre-job briefing process communicates to the workers the scope of the work, the hazards and requirements, and the controls such that work can be performed safely. Pre-Job Briefings are a key element of successful implementation of Integrated Environment, Safety and Health Management System (ISMS) at the activity level.

The Post-Job Review process is a fundamental element for the Integrated Safety Management System (ISMS) core function of feedback and continuous improvement at the activity level. The positive and negative outcomes experienced during work performance serve as the talking points that lead to continual improvement. Formal and informal feedback shall be used to verify safe work performance, identify needed corrections, and communicate opportunities to improve the planning and safe execution of the work process.

3.0 IMPLEMENTATION

This document is effective upon publication.

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4.0 REQUIREMENTS

NOTE: For the tables in this section under the requirement "type" column, "V" means verbatim

and "I" means interpreted.

#	Requirement	Type V or I	Source
1.	Facility Guidance should exist which describes safety preplanning requirements for all operational activities.	V	DOE O 5480.19, Chg. 2, Chapter I, Section C.6
2.	 Involvement shall be maintained in the following activities, as they apply to the function of the organization: Hazard evaluation. Worksite inspections and assessments. Safety meeting and committee functions. Safety and health policy development. Pre-job briefings. Resolution of safety concerns. Accident/near miss investigation and corrective action planning. 	I	48 CFR 970.5223-1, Section (c)
3.	Workers shall be provided with access to the work documents, and adequate time to complete a hazard review prior to performing the work activity/task.	I	10 CFR 851.20.(a)(4)
4.	Using the graded approach, results from a completed or modified Automated Job Hazard Analysis (AJHA) shall be incorporated into work instructions, procedures, or other work activity documents, and communicated to work team members prior to commencing work.	I	DOE Lessons Learned No. 2001-HQ-EH- 2001-001, Recommended Actions
5.	If a Condensate Induced Water Hammer (CIWH) is identified or suspected during steam system operation, a shutdown and securing of the system is required. A Pre-Job briefing with affected facility personnel must be completed prior to restarting the system. At a minimum, the briefing must include an identification of staff/discipline support, discussion of the restart procedural requirements, use of appropriate personal protective equipment, determination of emergency egress routes and CIWH response actions, access control, work area hazards and control measures, and other information deemed relevant by restart management. Specific training for the individuals who will perform the activities associated with steam generation and distribution.	I	DOE M 231.1- 2, CRD; DOE Order 5480.19, Chapter VI; DOE Order 5480.19, Chapter I, Section C.6

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6.	Line management or, as appropriate, construction management shall ensure that a <u>pre-entry briefing</u> is provided to the entry team and support personnel to review requirements of the permit. (Confined Spaces)	I	MSC-RD- 11258, Confined Spaces; 29 CFR 1910.146
7.	A <u>pre-job briefing</u> shall be conducted in accordance with NFPA 70E-2009, Article 110.7(G), before starting each job.	Ι	NFPA 70E- 2009, Article 110.7(G)
8.	Line management or, as appropriate, construction management shall, when entry was performed by a subcontractor, conduct and document a <u>post-entry debriefing</u> with contractor personnel to determine if unanticipated hazards were encountered and to evaluate the follow-up actions. The documentation for such meetings shall be attached to the <i>Confined Space Entry Permit</i> and shall become a part of that record for record review purposes.	I	MSC-RD- 11258, Confined Spaces; 29 CFR 1910.146
9.	Radiological Work <u>post job reviews</u> shall be identified and retained as a radiological record.	I	MSC-5173, Articles 351, 712.3, and 742

5.0 PROCESS

The contents of this procedure are intended to provide direction and minimum expectations for the performance of pre-job briefings and post-job reviews. In all cases, the FWS may choose to take a more rigorous approach.

This procedure provides a process for determining the required formality for pre-job briefings and post-job reviews. It states criteria when practical and points to other documents that state expectations related to pre-job briefings and post-job reviews. These documents and the specific sections within them that apply to pre-jobs and post-jobs are listed in Attachments 1 and 2. These documents are not always specific when stating expectations, that is, they may state that information is to be discussed at the pre-job briefing, but do not always clarify if that briefing must be formal and documented or not. To that end, if the document is not specific, this procedure presumes that a formal, documented pre-job or post-job meeting is expected. As the referenced documents change, or if agreements have been reached with the respective Interpretive Authority, the Attachments will be updated to reflect that information.

The attachments are intended to provide the FWS a quick reference to the many documents that can affect whether a formal and documented pre-job briefing or post-job review is conducted, and to specific topics to be discussed.

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The expectation is that a verbal exchange of information always takes place before and after any job, whether in the field at the work location or in a more formal setting. Formal documentation might be created and maintained; it summarizes what was discussed and who was involved.

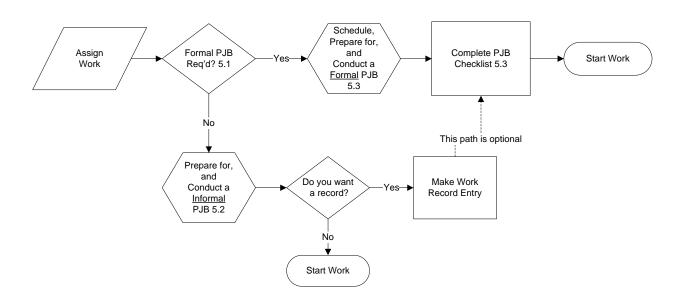
- <u>5.1</u> Determine if a Formal Pre-Job Briefing is required
- 5.2 Prepare, Conduct and Document an <u>Informal</u> Pre-Job Briefing
- 5.3 Prepare, Conduct and Document a Formal Pre-Job Briefing
- 5.4 Briefings for Continuing Work
- 5.5 Determine if a Formal Post-Job Review is Required
- 5.6 Conduct an Informal Post-Job Review
- 5.7 Conduct a Formal Post-Job Review
- 5.8 Documentation of Post-Job Reviews
- 5.9 Facility/Project-Specific Pre-Job Briefing Checklists

Appendix A – Tips for an Effective Pre-Job or Post-Job meeting

Attachment 1 – Requirements for Pre-Job Briefings

Attachment 2 – Requirements for Post-Job Reviews

FIGURE 1
Pre-Job Briefing (PJB) Process



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5.1 Determine if a Formal and Documented Pre-Job Briefing is Required

Pre-job briefings are expected before work begins, and can take the form appropriate to the situation using the graded approach, from an informal supervisor-to-worker discussion to a formal, structured and documented meeting. The Pre-job briefing is the last confirmation of readiness before performing individual work activities/tasks and provides the job participants with a collective understanding of the task to be completed. Topics typically include requirements for performing the task, identified hazards and necessary controls, environmental impacts, facility conditions, emergency contingency actions, and individual roles/responsibilities.

Actionee	Step	Action
Field Work Supervisor (FWS)/	1.	Review the approved procedure and/or work document to determine if a formal pre-job briefing is required based on these criteria below:
Person in Charge (PIC)		 Required by a Hanford Mission Support Contract Procedure or other document listed on <u>Attachment 1</u>.
		 Required by a Project or Facility procedure where the work activity will take place.
		 Specified in the work instructions, AJHA or permits (e.g., Radiological Work Permit [RWP]).
		• The work is not Skill-Based, per MSC-PRO-079, <i>Job Hazard Analysis</i> , <i>Appendix B</i> .
		• Requested by a member of the work team.
	2.	Consider conducting a formal pre-job briefing, even if not strictly required, whenever:
		• A large work team is involved,
		• The complexity of the job is high,
		• When intensive communication is required during the job
		• The familiarity and experience of the workers with the job or with one another is low
		• When timing or sequencing are important to success of the job.
		• When the task, even though routinely performed, has the potential to adversely affect safety basis equipment and/or operations.

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Actionee Step Action

- When the task is not routine in nature, is an initial attempt at a new task, or is one that is infrequently performed.
- 3. If a formal Pre-Job Briefing is <u>not</u> required, prepare for and conduct the <u>informal</u> briefing per <u>Step 5.2</u>.
- 4. If a <u>formal</u> Pre-Job Briefing is required or the chosen option, prepare for and conduct the briefing per <u>Step 5.3</u>.

5.2 Prepare, Conduct, and Document an <u>Informal</u> Pre-Job Briefing

Steps within Section 5.2 may be performed out of order, and performed at a level of detail appropriate to the work activity.

Actionee	Step		Action
FWS/PIC	1.	Prepare for the Pre-Job Briefing.	Consider the following:

- - Appropriate level of detail required for briefing
 - Potential interfaces with other work
 - Roles & assignments of work team clearly defined
 - Error precursors things that make an error more likely, and how to prepare the work team to deal with them during this job:
 - Task Demands
 - Work Environment
 - Individual Capabilities
 - Human Nature
 - Project/facility-defined error precursors, if they exist
- 2. Gather visual aides such as floor plans, charts, photographs, system drawings, etc., as appropriate.
- 3. Whenever possible, provide workers an opportunity to review and understand assignment (instructions/procedures) before briefing begins.

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Actionee Step Action

- 4. Assemble the work team and brief them on the following topics as they apply to the work. *The minimum discussion topics for routine jobs are marked with an asterisk* * .
 - * Scope of work to be performed
 - Four key questions
 - What are the critical steps of the work to be performed?
 - * How could a mistake be made at a critical step?
 - What is the worst thing that can go wrong?
 - What barriers or defenses are needed?
 - * Individual roles and responsibilities
 - Confirm worker training, qualification and medical monitoring as pertinent to the work activity
 - * Current workplace conditions
 - Verify conditions upon arrival at work site
 - * Discuss hazards, hazard controls, and PPE indentified in the Craft JHA, Standing JHA, or other applicable job hazards analysis document applicable to the work being performed.
 - Emergency response actions/emergency egress routes, especially if alternate egress routes or staging areas will be used, or if the work will occur in a remote location
 - Energy source controls, installation of lock out/tag out (LO/TO)
 - Special precautions (e.g., NFPA 70E applications, radiological)
 - Alerting method for look-alike equipment
 - *Specific points identified in Attachment 1 as informal.
 - Procedures involved
 - Stop work authority /responsibility
 - Error Precursors associated with the activity things that make an error more likely, and how the work team will deal with them:
 - Task Demands
 - Work Environment
 - Individual Capabilities
 - Human Nature
 - Facility/project-defined error precursors, if they exist
 - MSC-RD-9237, Motor Vehicle/Bicycle Safety
 - Travel route, conditions, parking options, and vehicular hazards

NOTE: Select a location for the briefing that is free from distractions whenever possible, however it is also advisable to walk down the job with the work team as part of the pre-job briefing.

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4	a .	
Actionee	Step	Action
	5.	Retain any Pre-Job Briefing documentation per <u>Step 7.0</u> .
		NOTE : No documentation is necessary for informal Pre-Job Briefings. The FWS may choose to use a Pre-Job Briefing checklist as a tool to designate those topics that will be discussed in the Pre-Job Briefing, or the FWS may record in the Work Record or other space within the work document that a pre-job briefing was conducted. If a checklist is used, the MSA Pre-Job Briefing checklist, <u>BD-6000-696</u> , is preferred, but an approved Facility checklist is acceptable. See <u>Step 5.9</u> for details. Craft signatures, in this case, are optional.
FWS/PIC Workers	6.	Confirm that PPE required for the job is available prior to starting work.
Workers	7.	Confirm that conditions at the work location are the same as discussed during the Pre-Job Briefing.
FWS/PIC	8.	Provide an equivalent pre-job briefing to personnel assigned to the job after the original pre-job briefing has been completed.

5.3 Prepare, Conduct and Document a Formal Pre-Job Briefing

The Fieldwork Supervisor or Person-in-Charge (FWS/PIC) who performs the functions associated with this procedure must have completed the FWS/PIC training and qualifications required by the facility or project where the work activity will occur.

Steps within Section 5.3 may be performed out of order, and performed at a level of detail appropriate to the work activity.

Actionee	Step	Action
FWS/PIC	1.	Prepare for the formal Pre-Job Briefing. Consider the following:
		 Work package/activity content
		 Appropriate level of detail required for pre-job briefing
		 Potential interfaces with other work
		 Roles & assignments are clearly defined
		 Confirm current training, qualification and medical monitoring as appropriate to the work activity.
		 Each worker understands his/her specific duty for this job
		 For work that is beyond Skill-Based, ensure an AJHA has been prepared and approved.
		 For work where the worker(s) will be exposed to hazards that require the use of engineering controls or personnel protective equipment (PPE) that are beyond their current position

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Actionee Step Action

proficiency, skills, experience, and training, confirm that the work instructions contain sufficient detail so that the workers can perform the activity safely and correctly.

- Consider the things that make an error more likely and how to prepare the work team to deal with them during this job (error precursors):
 - Task Demands
 - Work Environment
 - Individual Capabilities
 - Human Nature
 - Project/facility-defined error precursors, if they exist (e.g., SAFER cards)
- 2. Gather visual aides such as floor plans, charts, photographs, system drawings, etc., as appropriate.
- 3. Whenever possible, provide workers an opportunity to review and understand assignment (work instructions/procedures) before the briefing begins.
- 4. Determine from the Pre-Job Briefing Checklist which topics will be discussed during the formal Pre-Job Briefing. Review the bullets in step 7 to determine which are pertinent to the work activity.

NOTE: The Mission Support Alliance (MSA) Pre-Job Briefing checklist, <u>BD-6000-696</u>, is preferred, but an approved Facility checklist from Site Forms may be used. See <u>Step 5.9</u> for details.

5. Use the comments section of the pre-job checklist to write in topics from Attachment 1 that must be discussed.

NOTE: This step is intended to capture topics from <u>Attachment 1</u> that do not appear on the pre-printed checklist.

6. Notify the participants of the selected time and place for the pre-job briefing meeting.

NOTE: Whenever possible, use a location that is free from distractions, and include a job site walkdown as one component of the briefing.

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Actionee Step Action

- 7. Conduct the meeting. Review the work instructions and other pertinent documents as determined in step 4. Discuss items below with the workers, as applicable:
 - Scope of work to be performed
 - Work document or procedure and any supplemental materials gathered for this purpose.
 - Procedures use type and compliance expectations
 - Precautions and Limitations
 - Current work area conditions
 - Contents of any required permits
 - Hold points/inspection points
 - Individual job assignments (e.g., 2-person rule, first aid providers, escorts, spotters, unusual job responsibilities, etc.)
 - Hazards associated with this work activity and the surroundings
 - Alerting method for look-alike equipment
 - Hazard controls, including PPE and engineered controls, especially those that are not routinely used by these workers
 - Hazardous Energy source controls,
 - Installation of lock out/tag out (LO/TO)
 - o Work steps that sequence with LOTO installation/removal
 - o Safe-to-Work checks
 - Radiological aspects of the work per the RWP, AMW, etc.
 - Applicable topics from <u>Attachment 1</u> (as identified in the comment section of the pre-job briefing checklist).
 - Emergency response actions/emergency egress routes, especially if alternate egress routes or staging areas are involved, or work will occur in a remote location
 - Special tools or equipment
 - Stop work authority /responsibility
 - Four key questions
 - o What are the critical steps of the work to be performed?
 - o How could a mistake be made at a critical step?
 - o What is the worst thing that can go wrong?
 - o What barriers or defenses are needed?
 - Error precursors, and the controls that are in place for them (include project SAFER cards, if they exist)
 - Lessons Learned applicable to this work
 - Recovery and retest actions to be performed by the workers
 - Housekeeping when the job is complete applicable to this work
 - Ask if there are questions or concerns
 - MSC-RD-9237, Motor Vehicle/Bicycle Safety
 - Travel route, conditions, parking options, and vehicular hazards.

NOTE: See <u>Appendix A</u> for tips on how to conduct an effective Pre-Job Briefing.

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Actionee	Step	Action
FWS/PIC	8.	Personnel who may be assigned to the job after the pre-job briefing has been completed should receive an equivalent briefing from the field work supervisor prior to starting work.
	9.	Clearly mark the checklist as to which topics were discussed during the pre-job briefing.
	10.	Ensure that all attendees and presenters have signed the signature log. Any prejob briefing designated as formal MUST be documented. A record of the formal pre-job briefing is maintained that includes:
		 A signature log of those in attendance
		• The topics that were discussed.
		• Name(s) of the presenter(s).
	11.	Retain the checklist:
		• In the work document, or
		 According to RIDS if the Pre-Job Briefing is for procedural activities not included in a work package, or
		 If the activity is high risk radiological work, the original form is required to be retained by the Radiological Control group per MSC-5173. Place a copy in the work package.
FWS/PIC Workers	12.	Confirm that PPE required for the job is available prior to starting work.
WOIKOIS	13.	Confirm that conditions at the work location are the same as discussed during the Pre-Job Briefing.

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5.4 Briefings for Continuing Work

Actionee	Step	Action
FWS/PIC	1.	Conduct a meeting each work day as a minimum. All continuing work should begin each day with a pre-job briefing. Work continuing on to the next shift also warrants a briefing, particularly if members of the work team are being replaced.
		The FWS will tailor the formality and documentation of the daily/shiftly meetings as appropriate for the work that will occur on that shift.
	2.	Radiological pre-job briefings for ongoing radiological work with the same personnel may be conducted initially, and then on a weekly basis when:
		a. Work has a stable work scope, stable radiological conditions, and stable assigned resources, with the exception of work requiring entries into High or Very High Radiation Areas, Airborne Radioactivity Areas, or High Contamination Areas.
		 A summary of initial topics discussed and attendance at the pre- job briefing for radiological work should be documented in accordance with <u>MSC-5173</u> Articles 324 and 742.
	3.	When a new individual reports to the work team, that individual must be provided with the same information as the original team, or the information relevant to that person's participation. If a formal, documented pre-job briefing was required to begin the job, the briefing of

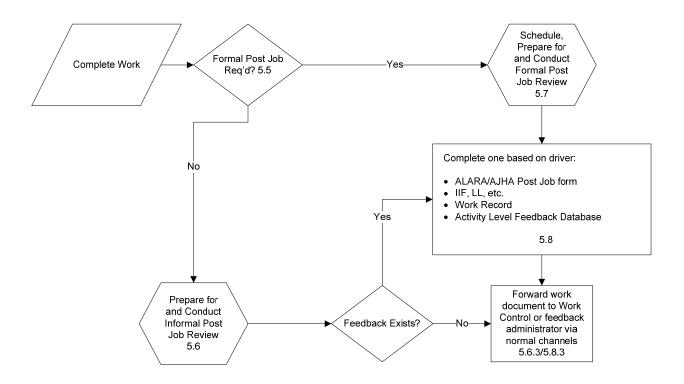
new team members must also be documented.

4. Retain any Pre-Job Briefing documentation per <u>Step 7.0</u>.

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FIGURE 2 Post-Job Review Process



5.5 Determine if a Formal Post-Job Review is Required

Conduct of Post-Job Reviews are often driven by the events or by information collected during work performance. Some form of communication between the assigned craft and the FWS/PIC on the results of the task is expected.

A Post-Job Review is a discussion held between workers and the field work supervisor following a specific work activity, which could be an entire job, or a discrete part of a larger job. Post-job reviews evaluate the entire work planning and execution process. If a formal Post-Job review is conducted, it is documented on specific forms, depending on the driver for the post-review.

Several processes exist within the MSA that could drive a review of completed work. Each process has its own triggers, purpose, and paperwork. Typically, a formal Post-Job Review will be the first step that leads into one of the formal reporting mechanisms (Lessons Learned, Corrective Action Management System, etc.); it would be prudent for the FWS to discuss the best path forward with those responsible for other processes (critique leader, Human Performance Improvement [HPI] investigator, lessons learned coordinator, etc.). In any case, the requirements of all procedures that apply to the situation must be satisfied.

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Post-job reviews are expected at the completion of all field work, and can take the form appropriate to the situation using the graded approach, from an informal supervisor-to-worker discussion to a formal, structured and documented meeting. Formal and documented post-job reviews are required when certain criteria have been triggered.

Actionee	Step	Action
FWS/PIC	1.	Upon completion of the work activity, determine if a formal post-job review is required. A formal post-job review may be conducted for any job, but is required in the following circumstances:
		• If required by one of the MSC procedures listed in <u>Attachment 2</u> .
		 If a Project/Facility procedure requires a Post-Job Review.
		 If an upset occurred during performance of the work.
		• If any work team member requests conduct of a Post-Job Review.
	2.	Consider conducting a formal Post-Job Review, even if not strictly required, whenever:
		 The activity was a first time performance of complex work.
		 The team size or complexity of the task warrants conduct of a formal Post-Job Review.
		 The work team determines that significant positive or negative Lessons Learned could be gained by conducting a Post-Job Review.
	3.	If a formal post-job review is <u>not</u> required or a chosen option, proceed to <u>Step 5.6</u> to conduct an informal Post-Job Review.
	4.	If a formal post-job review is required or the chosen option, proceed to Step 5.7 to prepare for and conduct a formal Post-Job Review.

5.6 Prepare and conduct an informal Post-Job Review

Actionee	Step	Action
FWS/PIC	1.	Upon completion of the task,
		 Solicit feedback from the work team on opportunities for improvement, observed problems and/or good practices.
		• Review the work record or other narrative log to determine if there is information that should be entered into a feedback mechanism.
		Review the work document for completion

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Actionee	Sten	Action

2. Evaluate feedback for lessons learned. If any exists continue to Step 5.8.

NOTE: No documentation is necessary for informal Post-Job Reviews; however as a good practice, the FWS may record in the Work Record or other space within the work document that a post-job review was conducted. The FWS can choose to use the Combined Post-Job ALARA/Post-Job Review form (site form <u>A-6003-465</u>) or the AJHA Feedback form as a tool during an informal Post-Job Review. Attendee signatures are not required for informal post-job reviews.

3. If no feedback exists, deliver the work package or procedure to be closed out in accordance with MSC-PRO-12115 or facility procedures.

5.7 Prepare, conduct and document a formal Post-Job Review

Actionee	Step	Action
FWS/PIC	1.	If an event occurred during the work, confer with the critique leader to determine his/her participation in the Post-Job Review meeting, and whether there will be one meeting or separate meetings to satisfy all drivers to review the job.
	2.	If Management has requested a Human Performance Improvement (HPI) review of the work activity, confer with the HPI investigator to determine his/her participation in the Post-Job Review meeting.
	3.	Identify the time and place for the Post-Job Review and notify the participants - workers, subject matter experts (SMEs), and other interested parties (DOE Facility Representative, SSW, Project management, etc.).
	4.	Locate/prepare the Combined Post-Job ALARA/ Post-Job Review form that will be used to document the review. (Site form <u>A-6003-465</u> , or the AJHA Feedback tool printed out of the AJHA program.)
	5.	Consider discussion topics in addition to those on the form, such as:
		 Did critical tasks go as planned? (What went right, what went wrong?)
		 Did the barriers we had in place to prevent or mitigate events work?
		What could we do better next time?
		 Comments in the work record that warrant discussion by the work team during the review.

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Actionee	Step	Action
FWS/PIC	6.	Reserve a location for the meeting that is free from distractions.

NOTE 1: Depending on the driver for conducting the Post-Job Review, other procedures could dictate additional steps or topics in the post-review process.

NOTE 2: See <u>Appendix A</u> for tips on conducting an effective meeting.

- 7. Conduct a formal, documented Post-Job Review meeting. Ensure the following areas are discussed as they apply to the work:
 - Required topics from MSC procedures (see <u>Attachment 2</u>)
 - Radiological issues
 - o Potential ALARA improvements
 - o Radiological Stop Work
 - Feedback/input on the job hazard analysis process.
 - The adequacy of the environmental, safety, and health hazard identification and mitigation
 - Adequacy of the environmental, safety, and health coordination and support
 - Appropriateness of PPE
 - Adequacy of special equipment used
 - Effectiveness of environmental barriers
 - Adequacy of the Pre-Job Briefing
 - Adequacy of work instructions or procedures; were instructions clear, drawings and references appropriate and comprehensive.
 - Appropriateness of tools, equipment and processes used to accomplish the work
 - Personnel coordination
 - Availability of personnel at work commencement, coordination of support resources
 - Worker performance during the job
 - Adequacy/completeness of personnel training
 - Adequacy of the environmental, safety, and health coordination and support
 - Plant conditions at work commencement including coordination between planning, operations, and maintenance and support organizations
 - The circumstances leading up to and resolving a Stop Work action, if one occurred during the work
 - Identification of contributing factors that helped improve the job performance
 - Recommended improvements for similar jobs in the future
 - Lessons from new deactivation or decommissioning activities

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Actionee	Step	Action
	8.	Complete all applicable sections of the Combined Post-Job ALARA/Post-
		Job Review form, <u>A-6003-465</u> , or the form generated from the AJHA
		program (the AJHA Feedback tool).
		NOTE : Formal Post-Job Reviews must be documented on one of these two forms. Additional forms might be required if other procedures have been triggered by the work activity.
	9.	Ensure that attendees have been documented on the Post Job Review form or a signature log.
		If the post-job meeting is serving more than one purpose, additional information might have to be gathered. Be sure to consult with representatives responsible for the other feedback mechanisms to coordinate your efforts. This could include a critique leader, HPI investigator, lessons learned coordinator, or others.

10. Continue to Step 5.8 for documentation instructions.

5.8 Documentation of Post-Job Reviews

Actionee	Step	Action			
FWS/PIC	1.	If information in the Work Record/work document needs to be retained, use the words, "Post-Review" or "Lessons Learned", in the Work Record margin to signify a need to retain the information.			
		NOTE : Feedback information noted in the Work Record will be retained during the post review process in <u>MSC-PRO-12115</u> , Work Management.			
	2.	If the <i>AJHA Combined Post Job/ALARA Review Form</i> , <u>A-6003-465</u> , or the AJHA Feedback tool was utilized during the post-job review complete the form and:			
		 Place it with the work document, or 			
		 Return it to Operations to be stored per facility RIDS (for work done according to procedures that were not part of a work document). 			
	3.	If Project-customized forms are used outside the requirements of this procedure, they will be completed and retained according to applicable Project procedures.			

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Actionee	Step	Action				
		If additional feedback mechanisms are appropriate because of the nature of the work or the event associated with the work, ensure that the facility or project has provided personnel to follow through. (see examples at Step 5.8.8).				
Work Control/ Support Staff	5.	Deliver the work package or procedure to be closed out in accordance with MSC-PRO-12115 or facility procedures.				
	6.	Document completion of a formal Post Job review and enter worker feedback in the Activity Level <i>Feedback Database</i> .				
	7.	Record feedback received and lessons learned information in the computer maintenance management system (CMMS) and/or AJHA Feedback Module for future reference (reference MSC-PRO-079 and MSC-PRO-067, Managing Lessons Learned).				
		NOTE: Back-loading of work record information in the CMMS is not necessary if information is to be retained in IDMS.				
	8.	Forward feedback to the process representative for processing, as appropriate:				
		• Lessons Learned, per MSC-PRO-067, Managing Lessons Learned				
		• Human Performance Improvements, <u>MSC-GD-29950</u> , <i>Human Performance Culpability Matrix</i>				
		 Process deficiencies found in accordance with requirements in <u>MSC-PRO-052</u>, Corrective Action Management. 				
		• Radiological Problem Reports per MSC-13536, Section 1.5.1				
		 Other processes identified in <u>MSC-PRO-077</u>, Reporting, Investigating, and Managing Health, Safety and Property/Vehicle Events 				
	9	Retain the Post-Job Review documentation (site form A-6003-465 or				

AJHA feedback tool) per <u>Step 7.0</u>. Other documentation noted in this step will be retained per direction in the respective procedures.

5.9 Facility/Project Customized Pre-Job Briefing Checklists

Actionee	Step	Action
Facility/Work	1.	Review the MSA Pre-Job Briefing Checklist (site form # BD-6000-696) to
Control or		determine if it is adequate for the work scope of the project or facility.
Management		

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Actionee Step Action

2. If the project prefers to develop a customized Pre-Job Briefing checklist to better serve the field work teams at the project, the following criteria must be observed during its development and use:

NOTE: Modifications to customized forms shall undergo the same process described for new form generation.

- a. All Pre-Job Briefing forms for MSA work teams shall include the following items:
 - the facility/project name in the title
 - spaces for entry of the work package number, name of the FWS/PIC, date, RWP number and AJHA number
 - Scope of work, including procedure type, coordination with other groups, workplace conditions, etc.
 - Hazards of and controls for the job, and a means of signifying which items were discussed, (e.g., MSDS, radiological, industrial hygiene, permits, etc.)
 - Specials tools and equipment
 - Nuclear, criticality safety, and security concerns (if these apply to the project)
 - Environmental considerations
 - Waste generation and storage
 - Hold Points
 - Job assignments
 - Lessons learned
 - Stop Work authority/responsibility
 - Emergency responses (e.g., alternate responses, take cover actions at remote locations, rally points, etc.)
 - the HPI four key questions
 - o What are the critical steps of the work to be performed?
 - How could a mistake be made at a critical step?
 - What is the worst thing that can go wrong?
 - o What barriers or defenses are needed?
 - Error precursors (e.g., project SAFE cards, if they exist)
 - Housekeeping
 - a signature log for attendees and presenters
- 3. Review the items listed in <u>Attachment 1</u> and include on the customized form all that apply to your project or facility.

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Actionee	Step	Action			
	4.	Consult with appropriate SMEs at your project to confirm that all applicable topics have been included.			
	5.	Submit the draft form to the MSA Work Management Interpretive Authority for concurrence.			
MSA Work Mgmt. SME	6.	Review the proposed form.			
		NOTE : The SME may request functional group reviews prior to approval.			
	7.	Submit the draft form to Forms Administration to be transformed into a Site Form, with the SME listed as the form owner.			
	8.	Notify the project when form is available for use.			

6.0 FORMS

Combined Post Job ALARA/ Post-Job Review Form, (also part of the AJHA), <u>A-6003-465</u> MSA Pre-Job Briefing Checklist, <u>BD-6000-696</u>

7.0 RECORDS

All records generated by this procedure are processed and maintained in accordance with MSC-PRO-10588, *Records Management Processes*.

Records Capture Table

Name of Document	Submittal	Î	Retention
	Responsibility		Responsibility
MSA Pre-Job	Facility/Project	•	If associated with a work package, retained
Briefing Checklist,	Designated		in the work package.
<u>BD-6000-696</u> , or	Personnel	•	If associated with facility-approved
Other Pre-Job			procedures performed without a work
Briefing checklists			package, facility retention until no longer
			needed, then retire in accordance with RIDS.
Post-Job Review		•	If the work is for a high risk radiological job
documentation, e.g.,			anticipated to meet or exceed the criteria of
			MSC-5173, Table 3-1 Part A, the
Combined Post Job			documentation should be maintained as a
ALARA / Post Job			radiological record in accordance with
Review Form			Article 742. (Original is sent to facility
			Radiological Protection staff for retention
			per RIDS, copy is retained in the work
			package. No copy is required for
			procedures.)

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8.0 REFERENCES

8.1 Source References

10 CFR 851.20, Management Responsibilities and Worker Safety and Health Program

29 CFR 1910.146, Permit -Required Confined Spaces

48 CFR 970.5223-1, Integration of Environment, Safety, and Health into Work Planning and Execution

DOE O 5480.19, Change 2 (Supp Rev 4), Conduct of Operations Requirements for DOE Facilities

CRD M 231.1A, Change 2 (Supp Rev 1),, Environment, Safety and Health Reporting Manual

MSC-5173, MSC Radiological Control Manual NFPA, 70E-2009, Standard for Electrical Safety in the Workplace

8.2 Working References

MSC-GD-29950, Human Performance Culpability Matrix

MSC-PRO-052, Corrective Action Management

MSC-PRO-067, Managing Lessons Learned

MSC-PRO-077, Reporting, Investigating, and Managing Health, Safety and Property/Vehicle Events

MSC-PRO-079, Job Hazard Analysis

MSC-PRO-10588, Records Management Processes

MSC-PRO-12115, Work Management

MSC-RD-9237, Motor Vehicle/Bicycle Safety

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Appendix A Tips and Practices for Leading an Effective Pre-Job or Post-Job Meeting

Common Shortcomings with Pre-job Briefings

During INPO plant evaluations, the following circumstances (in no particular order) have been observed during or associated with ineffective prejob briefings:

- Generalities, rather than specifics, used
- No discussion of error traps, possible consequences, and needed defenses for each critical step
- Error-prevention techniques or other defenses not adapted or tailored to specific demands of the task
- Conducted as a monologue; no active engagement by others
- No planning for the conduct of the prejob briefing; no time allowed for workers to prepare
- Principal participants not present for briefing
- Supervisor responsible for conducting multiple prejob briefings at the same time
- No consideration of the scope of the task or when the original task becomes a "new" task
- A checklist of several hundred items to cover used during a prejob briefing
- Conducted in a distracting location

Preparation

- A task preview should occur before the pre-job briefing. This involves giving the worker time to review the task before participating in the pre-job briefing. This provides the individual with a concept of the task, what the task is trying to accomplish, and what to avoid, especially if the task was addressed during work planning or the walkdown.
- Pre-job briefings should be conducted for routine as well as infrequently performed or complex tasks. Routine tasks are usually simple and/or repetitive. Experience shows that many events occur during 'routine' activities. Given human nature, there really is no such thing as "routine."
- There are two primary purposes of the pre-job briefing: 1) to prepare workers for what is to be *accomplished*, and 2) to sensitize them to what is to be *avoided*. Most pre-job briefings do not adequately address what to *avoid*. Error prevention is not adequately addressed, even when the first-line supervisor reminds the work crew, "Make sure you self-check!" If not anticipated by the procedure or work package preparer, the supervisor and worker can develop contingencies for the most likely and worst case outcomes. Such thinking enhances situation awareness and improves the application of error-prevention tools at critical points in a task.

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Location

- There are pros and cons to conducting a pre-job briefing in the field at the work location. On the plus side, the team can walk through the job together and ensure they are clear on what is to be done, where and how. However, communications could be difficult if the area is noisy or has many distractions. The best solution is often to conduct the pre-job briefing in two parts: discuss the job in a quiet place free from distractions, and walk down the job with the workers at the work location.
 - o Ensure the pre-job location is in an area relatively free of outside distractions if at all possible. A PIC may need to address the issue with other staff in the area not involved in the pre-job to ensure that they do not talk too loud leading to communication issues.
 - Whenever possible, include a job site walkdown with the work team as part of the pre-job briefing. Point out hazards, identify pertinent equipment, etc.
- Ask one or more team members to lead part of the discussion. This process puts the worker in an active rather than passive role and ensures they are engaged.

Setting the Tone

- Set the stage. Clear the area of distractions prior to the pre-job. Remove unauthorized reading material, crossword puzzles, etc.
- Start on time. If a certain resource is late, contact their manager to find out where they are. Do this early. Allow 5-10 minutes but no more than that.
- The level of situation awareness is subject to the emphasis managers and supervisors place on it, especially by immediate supervisors. Setting a tone of wariness and intolerance, especially during the pre-job briefing, will improve situation awareness and sensitize one's questioning attitude.
- FWS/PIC communications with workers should promote a spirit of cooperation, mutual respect, honesty, and fairness. This environment encourages workers to willingly bring up issues and share what is hindering their ability to accomplish assigned tasks efficiently and without error.
- Knowing the critical steps before conducting an activity can save the plant from unnecessary trips and transients. Workers are forewarned when their attention must be piqued, and they will more readily recognize where and what to self-check. Self-checking is more effective when a good pre-job briefing has taken place.
- If a PAX announcement is made during the meeting, take a timeout and listen to the announcement. Once the announcement is understood and it is NOT a plant emergency or configuration change that would affect the team, proceed with the meeting. Obviously if the announcement is a plant emergency respond accordingly.
- Assumptions should be challenged to detect unsafe attitudes and inaccurate mental models
 regarding the task. Minimizing assumptions reduces uncertainty by improving the team's
 situational awareness and questioning attitude toward the work activity. Challenge
 assumptions during the meeting, but in a way that promotes dialogue without humiliation.

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Encouraging Worker Participation

- Ask the SME to review the permits and aspects of the work related to that person's specialty.
 For instance, have the Radiological Control Technician review RWP and AMW, Industrial
 Hygienist review the confined space permit, Environmental Compliance Officer review
 CERCLA documentation, etc.
- Pre-job briefings should be a *dialogue* among the participants, rather than a monologue by the FWS/PIC. A genuine dialogue will uncover subtle conditions that could lead to error. Intelligent conversations between the team members will help recognize assumptions, error traps, and misunderstandings that could lead to an event.
- Asking the workers about errors they have observed while doing similar work in the past can be an effective lead in to a discussion of the errors that could affect today's work.
- Involve the team by asking questions related to the work scope and their role in it, emergency response actions, PPE requirements, RWP void limits, Error Precursors, Criticality Limits, etc. This will help to ensure that the entire team is paying attention.
- If inexperienced workers are assigned and/or non-facility personnel are involved be more indepth with specific areas of concern such as emergency responses, job hazards and work area configuration.
- Once the meeting is completed, communicate to the team expectations regarding timeliness in reporting to their assigned work location.
- Consider using one final question at the end of the meeting that elicits an acknowledgement by the workers of their readiness and understanding for the job, such as:
 - o Are you prepared to do this job error-free?, or
 - o Is everyone comfortable with the job and his/her part in it?